

THIS REFERENCE ON
ATTACHED CD

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 August 2002 (22.08.2002)

PCT

(10) International Publication Number
WO 02/064611 A1

(51) International Patent Classification⁷: **C07H 21/02**,
21/04

San Francisco, CA 94081 (US). **SUN, Yongming** [US/US];
869 S. Winchester Boulevard, Apartment 260, San Jose,
CA 95128 (US). **LIU, Chenghua** [CN/US]; 1125 Ranchero
Way #14, San Jose, CA 95117 (US).

(21) International Application Number: PCT/US02/04197

(22) International Filing Date: 12 February 2002 (12.02.2002)

(74) Agents: **LICATA, Jane, Massey et al.**; Licata & Tyrrell
P.C., 66 E. Main Street, Marlton, NJ 08053 (US).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/268,292 13 February 2001 (13.02.2001) US

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VN, YU, ZA, ZM, ZW.

(63) Related by continuation (CON) or continuation-in-part
(CIP) to earlier application:

US 60/268,292 (CIP)
Filed on 13 February 2001 (13.02.2001)

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **DI-
ADEXUS, INC.** [US/US]; 343 Oyster Point Boulevard,
South San Francisco, CA 94080 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **SALCEDA, Susana**
[AR/US]; 4118 Crescendo Avenue, San Jose, CA 95136
(US). **MACINA, Roberto, A.** [AR/US]; 4118 Crescendo
Avenue, San Jose, CA 95136 (US). **HU, Ping** [US/US]; 108
Palmer Street, San Ramon, CA 94583 (US). **RECIPON,
Herve** [FR/US]; 85 Fortuna Avenue, San Francisco, CA
94115 (US). **KARRA, Kalpana** [IN/US]; 6511 Rainbow
Drive, San Jose, CA 95129 (US). **CAFFERKEY, Robert**
[IE/US]; 849 West Orange Avenue, Apartment 1030, South

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: COMPOSITIONS AND METHODS RELATING TO BREAST SPECIFIC GENES AND PROTEINS

(57) Abstract: The present invention relates to newly identified nucleic acids and polypeptides present in normal and neoplastic breast cells, including fragments, variants and derivatives of the nucleic acids and polypeptides. The present invention also relates to antibodies to the polypeptides of the invention, as well as agonists and antagonists of the polypeptides of the invention. The invention also relates to compositions comprising the nucleic acids, polypeptides, antibodies, variants, derivatives, agonists and antagonists of the invention and methods for the use of these compositions. These uses include identifying, diagnosing, monitoring, staging, imaging and treating breast cancer and non-cancerous disease states in breast tissue, identifying breast tissue, monitoring and identifying and/or designing agonists and antagonists of polypeptides of the invention. The uses also include gene therapy, production of transgenic animals and cells, and production of engineered breast tissue for treatment and research.

WO 02/064611 A1